DIRECTION

WHEREAS, M/s. Jai Balaji Industries (Unit -IV) [hereinafter referred to as the industry] located at Baskopa, P.O. Rajbandh, Durgapur – 713212 is an integrated steel plant comprising of sponge iron section, coke oven section, sinter plant, ferro alloy and 85 MW captive power plant. The industry has 4X100 TPD DRI Kilns, 3X16 MVA Sub-merged Electric Arc Furnaces (SEAFs), 2 nos. Reheating Furnace, 6X15 Ton/heat Induction Furnaces with Concast and Rolling mills, 2X55m3 Mini Blast Furnace (MBF), 1 no. coal washery, 1 no. Coke Over Plant [4X21 ovens (35 Ton/oven/day) Coke oven batteries], 1X85 TPH & 1X170 TPH CFBC Boiler and 4X10 TPH WHRBs (with DRI Kiln) and 2X42 TPH WHRBs (with Coke Oven). The DRI Kilns with 4 nos. WHRBs are provided with 2 field ESP and connected to 2 stacks of height 30m from G.L., 2 nos. SEAFs are connected to a common stack and the other SEAF is connected to a separate stack of height 40m from G.L., Coke Oven Plant with 2 WHRBs are provided with 2 field ESP and connected to 2 stacks of height 60m from G.L., the MBFs are connected to a separate stack of height 30m from G.L.

AND WHEREAS, an inspection of the industry was carried out by the official of the West Bengal Pollution Control Board (hereinafter referred to as the Board) on 17/07/2017. During inspection all the Rotary Kilns were found in operation, but half of the ESP fields were non-functional resulting in very high emission through all the stacks attached to the kilns. High leakages were observed from ABC tops of all Rotary Kilns. Internal housekeeping was found to be extremely poor. No water sprinkler system was functional during inspection and internal roads were found to be damaged at number of locations near sponge iron division. Disposal of solid waste was observed at different locations inside the plant.

AND WHEREAS, the industry was earlier inspected on 19/04/2017. Very high stack emission was noticed through ESP stack of CFBC boiler. Huge fugitive emission was also noticed with extremely poor visibility especially at Cooler discharge section. During inspection stack monitoring was conducted and the industry failed to meet PM emission standard. The results are shown below:-

<table>
<thead>
<tr>
<th>Sampling date</th>
<th>Sampling point</th>
<th>Parameter</th>
<th>Results obtained (mg/Nm³)</th>
<th>Permissible standard (mg/Nm³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>19/04/2017</td>
<td>Rotary Kiln 1 &amp; 2</td>
<td>PM</td>
<td>291.72</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Rotary Kiln 3 &amp; 4</td>
<td></td>
<td>1418.24</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boiler (capacity 85 MW)</td>
<td></td>
<td>607.81</td>
<td>50</td>
</tr>
</tbody>
</table>

AND WHEREAS, fugitive emission monitoring was also conducted during inspection and the analysis report shows gross non-compliance which is tabulated below:-

<table>
<thead>
<tr>
<th>Date of Sampling</th>
<th>Sampling point</th>
<th>Parameter</th>
<th>Result obtained (µg/Nm³)</th>
<th>Permissible limit (µg/Nm³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>19/04/2017</td>
<td>Near Material Handling</td>
<td>TSPM</td>
<td>4599.96</td>
<td>2000</td>
</tr>
<tr>
<td></td>
<td>Near Cooler Discharge</td>
<td></td>
<td>8994.77</td>
<td></td>
</tr>
</tbody>
</table>
AND WHEREAS, a show cause notice was issued to the industry by Environmental Engineer, Durgapur Regional Office of the Board on 06/06/2017 for above mentioned failure in meeting emission standard. The industry was earlier directed on 13/04/2017 to submit a compliance report on the basis of non-compliance as observed during inspection on 03/04/2017, but the industry did not submit any reply.

AND WHEREAS, major sources of generation of liquid waste are Gas Cooling Tower of DRI section, Coke quenching operation, washing and bathing activity of worker of the industry. It was observed during inspection on 17/07/2017 that untreated waste water was being discharged by the industry outside the plant premises towards southern side. The effluent treatment plant was functional during inspection, however it is insufficient to treat the volume of effluent generated. During inspection effluent sample was collected and the analysis report shows non-compliance (TSS-1030.0 mg/l, COD-377.01 mg/l).

AND WHEREAS, the Consent to Operate of 1X16 MVA SEAF of the industry is valid upto 31/08/2021 and CFO for rest of all the units is valid upto 30/09/2018.

AND WHEREAS, the industry was called for a hearing by the Board on 14/09/2017 for such non-compliance of environmental norms as observed during inspection by the Board officials.

AND WHEREAS, the Director of the industry appeared in the hearing and agreed to the above mentioned observations. He submitted that they have taken following corrective measures to comply with the environmental norms:-

- Insulation of ESP attached to rotary kiln 1 & 2, maintenance of TR sets and transformer oil filtration has been completed. Insulation of ESP attached to rotary kiln 3 &4 will be completed within three months.
- Outlet slip ring and pneumatic system of rotary kilns has been changed to stop flue gas emission through the stack of the rotary kilns as well as ABC cap.
- 170 TPH boiler of Captive Power Plant has been taken shut down since 01/09/2017 for maintenance and after completing the same they will inform the Board accordingly.
- Filtration and maintenance of ESP transformers and temporary alignment of ESP field plates for the boilers of CPP has been completed.
- Necessary steps have been taken for improvement of housekeeping.
- Internal roads will be concretized with fly ash generated from captive power plant.

NOW THEREFORE, considering above facts, M/s. Jai Balaji Industries (Unit -IV) located at Baskopa, P.O. Rajbandh, Durgapur – 713212 is hereby directed as follows:-

1. That, the industry shall operate only with proper functioning of Air Pollution Control devices (APCD).

2. That, the industry shall ensure compliance of the emission standard for both stack emission as well as fugitive emission by taking appropriate steps within 31st December, 2017.

3. That, the industry shall take shut down of its manufacturing activity whenever the pollution control system fails to function and the same will be intimated to the Board.

4. That, the industry shall not restart the 170 TPH boiler of captive power plant before completion of total overhauling of ESP.
5. **That**, the industry shall strictly follow direction issued by the State Board vide memo no. 1044-4A/WPB/CE-II/GEN/2008 dt. 01.06.2012.

6. **That**, the industry shall ensure proper functioning of the online emission monitoring system (OEMS) including regular calibration and continuously send data generated from the OEMS to the CPCB server.

7. **That**, the industry shall properly maintain and operate the water sprinklers and ensure sufficient water supply so as to minimize fugitive dust emission.

8. **That**, the industry shall take proper steps to comply with the effluent discharge standard.

9. **That**, the industry shall improve the internal housekeeping and road conditions at the earliest.

10. **That**, the industry shall execute a **Bank Guarantee** (proforma enclosed) of **Rs. 10,00,000/-** (Rupees Ten lakh) only, valid for twelve (12) months within fifteen [15] days from the date of issuance of this direction in favour of the **WEST BENGAL POLLUTION CONTROL BOARD** (Corporation Bank IFSC Code CORP 0000663) as an assurance to comply with the environmental norms as well as Board’s direction.

The Environmental Engineer, Durgapur Regional Office of the Board is requested to conduct an inspection of the industry after 31\textsuperscript{st} December, 2017 to verify the status of environmental compliance. In case of further non-compliance by the industry, the Board will initiate strict regulatory action like closure with disconnection of electricity of the industry.

This direction is issued in exercise of the powers conferred under the provision of Section 33A of Water (Prevention & Control of Pollution) Act, 1974 and Section 31A of Air (Prevention & Control of Pollution) Act, 1981 and rules made thereunder after being approved by the Competent Authority.

By Order,

**Sd/-**

Sr. Environmental Engineer & In-charge Operation & Execution Cell
West Bengal Pollution Control Board